

Amendment  
Serial No. 10/550,102  
Attorney Docket No. 053057

**REMARKS**

Claims 1, 3 and 9-14 were pending in the present application. Claims 3 and 9-14 were rejected. Claims 9 and 10 are herein amended. Claims 3 and 9-14 are herein cancelled without prejudice.

**Applicants' Response to Claim Objections**

The Office Action indicates that claims 9 and 10 are objected to as being dependent from rejected claim 3. It appears that if claims 9 and 10 were only dependent on claim 1, they would be allowable. Accordingly, Applicants herein amend these claims to be dependent on claim 1 alone. Thus, claims 9 and 10 should be allowable. Applicants also make minor amendments to improve the form of claims 9 and 10.

**Applicants' Response to Claim Rejections under 35 U.S.C. §112**

**Claims 3 and 9-14 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

The Office Action states that it is unclear if the claims are drawn to a specific sequence (i.e., consisting of) or if the claims are drawn to a sequence with modifications possible. The Office Action states that the phrase “consisting of” is closed language, and thus, if a polypeptide consists of an amino acid, it cannot have an amino acid added, since that would improperly broaden the phrase “consisting of.”

Amendment  
Serial No. 10/550,102  
Attorney Docket No. 053057

In response, Applicants herein cancel claims 3 and 11-14. Applicants also amend claims 9 and 10 to remove dependency on claim 3. Accordingly, this rejection is moot.

**Claims 3 and 11-14 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Office Action alleges that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.**

This is a written description rejection. The Office Action repeats the argument that this claim is broad in scope and that nearly any polypeptide could meet this claim limitation. The Office Action notes that since the claim refers to disulfide bond formation and channel inhibiting activity, a more specific description of the protein structure and modified residues would be needed to predict the effects of the modifications.

Applicants herein cancel claims 3 and 11-14. Thus, this rejection is moot.

**Claims 3, 12 and 14 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Office Action alleges that the claims contain subject matter which was note described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time the application was filed, had possession of the claimed invention.**

Amendment  
Serial No. 10/550,102  
Attorney Docket No. 053057

This is a new matter rejection. With respect to claims 2 and 12, the Office Action states that there is no literal support for substitutions of two (2) amino acids. The Office Action states that the original claims recite the term “several,” but that the term “several” does not necessarily support the number two (2).

Applicants herein cancel claims 3, 11 and 12. Thus, this rejection is moot.

**Applicants' Response to Claim Rejections under 35 U.S.C. §102**

**Claims 3 and 9-14 were rejected under 35 U.S.C. §102(b) as being anticipated by Oswald et al. (“Solution Structure of Peptide Toxins That Block Mechanosensitive Ion Channels,” The Journal of Biological Chemistry, Vol. 277, No. 37, Issue of September 13, 2002, pp. 3443-34450).**

It is the position of the Office Action that Oswald discloses the invention as claimed. The Office Action states that claims 3 and 9-14 are interpreted broadly to include peptides that comprise the recited amino acid sequence. The Office Action also states that claim 3 does not specify the length of the deletion, substitution, insertion or addition.

Applicants herein cancel claims 3 and 11-14. Thus, this rejection is moot.

**Allowable Subject Matter**

The Office Action indicates that claim 1 as written is allowable. As noted above, Applicants herein amend claims 9 and 10 to be dependent upon only claim 1, and cancel claims 3 and 11-14. Therefore, the application should pass on to allowance.

Amendment  
Serial No. 10/550,102  
Attorney Docket No. 053057

For at least the foregoing reasons, the claimed invention distinguishes over the cited art and defines patentable subject matter. Favorable reconsideration is earnestly solicited.

Should the Examiner deem that any further action by applicants would be desirable to place the application in condition for allowance, the Examiner is encouraged to telephone applicants' undersigned attorney.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

**WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP**



Ryan B. Chirnomas  
Attorney for Applicants  
Registration No. 56,527  
Telephone: (202) 822-1100  
Facsimile: (202) 822-1111

RBC/nrp